00270

1971/03/19

UNCLASSIFIED

THE JOINT CHIEFS OF STAFF
WASHINGTON, D.C. 20301

THE JOINT STAFF

7136435

19 March 1971

MEMORANDUM FOR THE CHAIRMAN, VSSG WORKING GROUP FOR NSSM 99

Subject: RVNAF Ground Force Variants Study (U)

1. This memorandum forwards the NSSM 99, Phase II, RVNAF Ground Force Variants Study as directed at the 24 February 1971 VSSG/WG meeting. Appendix B to the study (RVN Military Region Analysis) will be forwarded under separate cover when complete.

2. The attached report incorporates changes in editing and structure which were discussed by Brigadier General St John and Captain Sansom on 9 March 1971 and additional data on ROK forces (Appendix E) and Quality Improvements (Appendix F) has been added. The thrust and content are otherwise unchanged from those of the preliminary study.

3. Without attachment, this memorandum is UNCLASSIFIED.

John R Lauderdale
JOHN R. LAUDERDALE
Colonel, USA
Chairman, Military Analysis
Panel for NSSM 99

Attachment a/s

Declassified/Released on 12-1-95
under provisions of E.O. 12958
by J. Saunders, National Security Council

UNCLASSIFIED

23

M

[illegible]

RVNAF GROUND FORCE VARIANT STUDY

MILITARY ANALYSIS PANEL
NSSM 99 PHASE II

19 MARCH 1971

Declassified/Released on 12-1-95
under provisions of E.O. 12958
by J. Saunders, National Security Council

TOP SECRET
UNCLASSIFIED

NSSM 99

RVNAF GROUND FORCE VARIANT STUDY

TABLE OF CONTENTS

PAGE

1. PROBLEM 1
2. GENERAL CONSIDERATIONS 2
3. GVN CONTROL INFORMATION 4
4. OTHER FACTORS AFFECTING GVN FORCE LEVELS AND DISPOSITION 6
5. REDISTRIBUTION OF FORCES 10
6. ALTERNATIVE FORCE POSTURES 13

APPENDIX

PROJECTION OF COMMUNIST FORCE LEVELS .... A

RVN MILITARY REGION (MR) ANALYSIS .... B

UNITED STATES/FREE WORLD FORCES C

RVNAF FORCE STRUCTURES .... D

CONSIDERATIONS FOR REDISTRIBUTION OF FORCES .... E
  TAB A SOUTHEAST ASIA WEATHER

QUALITY IMPROVEMENTS .... F

RVNAF GROUND FORCE VARIANT STUDY

1. The Problem. The current large-scale operations in Cambodia and the Laotian Panhandle can have marked impacts on long-term requirements for Allied forces in Southeast Asia and on the preferred composition and distribution of those forces. Despite the uncertainty regarding the outcome of current operations, US policy and current US planning prescribe a continued redeployment of US ground forces from Southeast Asia and some reduction in troop contributing country (TCC) forces is anticipated. If the enemy threat remains constant or increases as US and TCC forces redeploy, there is the prospect of a shortfall in total allied forces. If the enemy threat decreases, there may be a lessened shortfall in allied forces, parity or an excess in allied capability. Which of the above conditions will obtain cannot be forecast. Therefore, the problem addressed in this paper is development of illustrative variants in RVNAF force structure and force deployments which may be appropriate in view of the possible outcomes of on-going operations.

2. General Considerations. The specific enemy threat to RVN for FY 72 is difficult to predict at this time although some order of magnitude estimates and reasonably valid planning assumptions can be made (See Appendix A). The on-going operations in Laos and Cambodia should have significant effects on the enemy's capabilities, but there is no assurance that they will force the enemy to change materially either the nature or general location of his past efforts against RVN. The MR studies (Appendix B) show a generally consistent pattern in enemy main force activity until the allied operations into Cambodia. Ever since then, there has been no indication of lessened enemy interest in MR III and IV. From a GVN point of view, those MRs still require a high priority. Current operations have tended to shift the main force war across the border into Cambodia and South Laos. The GVN is likely to continue operations in Cambodia to protect MRs III and IV and to try to retain enough force in MR III and IV to keep them in a "low-risk" status.

Redeployments of US and TCC forces (See Appendix C) may create a shortfall of regular forces in RVN. MR studies indicate that there may be a particularly significant shortfall in MRs I and II. Alternative total GVN ground force levels are discussed in Appendix D.

In regard to disposition of forces, the two Northern MRs have had a lower proportion of GVN Regular forces than the Southern MRs for some time. The gains in pacification in MRs III and IV have been more rapid than in MRs I and II. If the situation in MRs III and IV permits, it would be to GVN's advantage to increase its regular force operations, particularly in MR I and Northern MR II. There would be the prospect of improved security and thus more rapid pacification. Further, it would be to GVN's advantage to achieve a main force capability in MR I and II sufficient to shift the main force war into Laos. Not only would it help pacification in the Northern 2 MRs but would hamper the enemy's efforts throughout RVN. Possible means to achieve a redisposition of Regular forces are discussed in Appendix E.

Across-the-board improvement in armament, communications, supporting equipment, improved operational capability within the constraints of existing organization and equipment, and improvements in general morale would enhance RVNAF force effectiveness. Several possibilities for such quality improvement are examined in Appendix F.

3. GVN Area Control Information. Despite a reduction in the friendly to enemy ratio of combat strength in all but MR I (See Appendix B) GVN control has continued to rise in all areas, with the largest gain recorded in mid CY 1970. MR III suffered a control decline in latter CY 70, which may be associated with the sharp drop in the combat strength ratio as US units redeployed. In MR II, however, control continued to rise during and after US troop redeployments.

During the second half of CY 1970 enemy ground attacks, attacks by fire, and harassment by fire decreased. In this same period there was an overall decline of about 40 percent in enemy harassment/terror incidents in MRs I and II whereas in MRs III and IV they stayed about the same. The enemy stepped up his efforts to economize his forces with enemy KIA per incident decreasing substantially (about 50 percent) everywhere but in MR I; whereas, friendly KIA per incident declined only slightly.

ARVN/VNMC forces continued the trend toward fewer but longer duration large unit operations. The improvement is particularly noticeable in MR III and is probably related to preemptive operations in Cambodia.

The number of enemy contacts per battalion declined for all MRs during the third quarter, reflecting decreased enemy activity. Except in MR I, however, contacts per battalion increased during the fourth quarter, CY 70. This increase in MR IV is not unexpected, given the rather constant enemy activity level and the campaign against enemy base areas. In MRs II and III, given the declining enemy activity, increased contacts are interpreted as an indication of more effective and aggressive ARVN tactics.

An evaluation of RF/PF activity is difficult. The changeover to Vietnamese reporting and a new system resulted in data turbulence which inhibited trend analysis. With this reservation, however, it does appear that RF units in MR II are making progress in gaining contacts, although the PF platoons have remained at about first half 1970 levels.

4. Other Factors Affecting GVN Force Levels and Dispositior

a. Ability of GKR to Cope with the VC/NVA. Improvement of GKR forces, coupled with successful interdiction of NVA supplies, could eventually result in FANK largely neutralizing VC/NVA forces in central Cambodia, thus reducing the requirement for RVNAF to conduct cross-border operations in Cambodia and reducing the VC/NVA threat to MRs III and IV in RVN. Conversely, the failure of GKR forces to improve would require RVNAF to maintain sizeable forces in MRs III and IV to conduct cross-border operations and to protect the Capital and the densely populated, rice growing areas of the two military regions. At the present time, GKR forces, although improving, have not yet demonstrated a capability to cope with the VC/NVA. The GVN have had forces in Cambodia ranging as high as 22,000 personnel engaged in security/combat operations.

b. Success of Operations in Laos. If RVNAF is successful in its current operation to sever the enemy's LOC in Southern Laos, NVN's ability to support the VC/NVA south of Highway 9 will be greatly reduced, thus lowering the effectiveness of enemy units in RVN and Cambodia.

c. Relative Importance of Areas. The rice producing, densely populated areas are more important to the GVN than the sparsely populated jungle, highland, or mountain regions. The GVN, therefore, should place a higher priority on insuring security for MRs III and IV and the coastal areas of MRs I and II than for the other areas of RVN.

d. Proximity to NVN. VC/NVA forces close to NVN borders are easier for the enemy to support, reinforce, and control than those at greater distances from the border. Accordingly, enemy units in MR I, controlled and supported by the High Command, Armed Forces, North Vietnam, in Hanoi, represent a greater threat than VC/NVA units farther from the border and require proportionally greater RVNAF resources to contain and defeat.

e. Size of the MR and the Nature of the Terrain Mountainous regions of MRs I and II and the jungle areas of NW MR III offer the enemy cover and concealment and require a disproportionate effort to find, fix, and destroy him. Moreover, because of the vastness of MR II, roughly the same size as the remaining three MRs, a high friendly to enemy troop ratio is required to provide security for the population distributed throughout the MR.

f. Attitude of the Population. In areas in which the populace perceive an insecure situation, the people may be intimidated by the enemy and may support the VC/NVA while failing to cooperate with friendly forces. To establish security in these areas, greater resources are required over a longer period.

g. Facilities, Support, and Command and Control. Prior to deploying forces to new locations, GVN must consider the RVNAF capability to provide facilities to support and to control the units in the new areas. The requirement for facilities should generally be satisfied by use of those left by departing US Forces. Requirements for command and control and logistical support, however, must be addressed. For example, GVN could decide to send additional forces to the Highlands to meet the enemy threat in Pleiku and Kontum Provinces. The only control headquarters in the area, other than Headquarters II Corps, consists of Headquarters, 22d Infantry Division (Fwd). The latter headquarters is neither manned nor equipped to coordinate, support, and control large-scale operations. Accordingly, it would have to be augmented prior to the arrival of reinforcing ARVN units.

5. Redistribution of Forces. The main force war has been transferred over the past several months from RVN to Cambodia and, more recently, to Southern Laos. If the focus of the main force war can be maintained outside RVN, prospects for more rapid pacification and development in RVN will be greatly enhanced. It could permit a more rapid conversion of contested areas into secure areas, the consequent substitution of police and people's self-defense for Territorial Forces in the areas secured, and increased economic development and improvement of living conditions which would make it more difficult for the enemy to mount and sustain large-scale operations in those areas. This could permit transfer of authorizations, though not necessarily personnel, from RVNAF units now engaged in those areas to areas where they are needed more.

Territorial Forces are recruited within the Province and are employed there except in exceptional circumstances. Thus, their size in any given area is limited by the local population rather than the total manpower pool. Though Regular Forces can be used and are used wherever required, they are not as easily moved as their US counterparts. They are recruited largely from the region in which they are intended to be used and their use for long periods of time outside the region subjects them to increased problems of morale and desertions. Thus, on a long-term basis, the level of Regular Forces which may be employed in an area is partly a function of the population in the area concerned.

The RVNAF force levels in MRs III and IV are influenced by the extent of RVNAF operations required in Cambodia. RVN Forces have been engaged in cross-border operations in Cambodia with an average force strength of up to 22,000 personnel. These operations have served to disrupt VC/NVA efforts to establish a LOC to their units in RVN MR III and IV as well as in Cambodia. An additional achievement of these operations has been relief of enemy pressure on FANK units and maintenance of an allied LOC to Phnom Penh. Without the RVNAF operations and support, the viability of GKR would have been seriously affected and it is doubtful that GVN could have attained the degree of the success now being achieved against VC/NVA Forces in MRs III and IV.

Operations by RVNAF units probably will have to be continued across the Cambodian frontier during FY 72 to assure the interruption of the enemy LOC and infiltration routes to RVN MR III and IV. The GVN will tend to concentrate on better security for these two regions since they form the nucleus of a viable RVN. It can be anticipated that RVNAF, upon more effective pacification of the southern two MRs, will have forces available for use in the northern two MRs. The MR studies forecast a shortfall of Regular Forces in these two northern MRs to fill the void created upon the redeployment of US/Free World Forces. The nature of RVN force redeployments or methods of force restructuring to fill this void will be largely dependent upon projections and results of enemy force operations. If the threat to the southern MRs, as well as Cambodia, are appreciably lessened due to the current cross-border operations in Laos as well as Cambodia, then it is reasonable to expect that more emphasis can be devoted to the neutralization and pacification efforts in the less important and more remote areas of MRs I and II.

C. Alternative Force Postures. The following table shows force dispositions which could be effected using the GVN ground forces considered in this report. It reflects current RVNAF data in the Army Activities Report, Southeast Asia, dated 3 February 1971 and shows possible redispositions of GVN forces within force levels of 1.0, 1.1, and 1.2 million. The table also reflects present and alternative force data in maneuver battalions for US and Free World MAF. The projected force information is highly tentative. Final force levels and dispositions will be influenced heavily by GVN and field command evaluation of the threat when the results of current operations are known.

RVNAF FORCES	MR 1	MR 2	MR 3	MR 4	RESERVE	TOTAL
Now						
Mn Bns RVNAF	39	31	45	44	12	171
Border Def Bns	8	12	9	8	-	37
R/F Co's	228	413	413	636	-	1,690
PF Plts	1,104	1,559	1,196	3,254	-	7,113
1 Mil Force						
Mn Bns	39	31	31	24	12	137
Border Def Bns	8	12	9	8	-	37
R/F Co's	228	413	413	625	-	1,679
P/F Plts	1,214	1,669	1,196	3,400	-	7,479
1.2 Mil Force						
Mn Bns	55	47	45	36	12	195
Bor Def Bns	8	12	9	8	-	37
R/F Co's	328	513	413	625	-	1,879
P/F Plts	1,214	1,669	1,196	3,400	-	7,479
1.1 Mil Alternative Deployment						
Mn Bns	54	45	30	30	12	171
Border Def Bns	8	12	9	8	-	37
R/F Co's	228	413	413	625	-	1,679
P/F Plts	1,214	1,669	1,196	3,400	-	7,479
ROK FORCES (Mn Bns)						
Now	4	18	-	-	-	22
Alternative	22	-	-	-	-	22
THAI/AUS/N.Z. (Mn Bns)						
Now	-	-	8	-	-	8
End FY 72	-	-	2	-	-	2
UNITED STATES (Mn Bns)						
Now	32	6	15	-	-	53
Alt 1	10	3	5	-	-	18
Alt 2	15	5	5	-	-	25
Alt 3	-	-	-	-	-	0

It should be noted that the redisposition of forces considered in the table may be either temporary or permanent.

-- A temporary redisposition would be relatively easy to achieve. RVNAF reserve forces (nine Marine and nine Airborne Battalions) have been moved throughout RVN and some of them are now committed in Laos. The Ranger battalions have had a similar reserve role within the Military Regions. In both the Cambodian and Laotian operations, RVNAF showed it was able to manage the relief, movement, and recommitment of large units. A permanent transfer of units from MRs III and IV to MRs I and II would be more difficult with attendant morale and desertion problems.

-- A more practicable alternative is to inactivate units in the south and use the space authorizations for new units in the North. The principal disadvantages of that approach are (1) the regional limitations on troop strength imposed under a regional recruiting system and (2) the time required to create and train new units.

The impacts of these disadvantages may be lessened to some extent by resort to other options considered in this report (e.g., creation of a new division using some units from the 1st ARVN Division as cadre).

In summary, the alternatives for GVN ground forces examined in this report include variations in strength, quality, and disposition. Full evaluation of the alternatives depends to some extent on projections of enemy and friendly strengths and dispositions which are, at this time, still tenuous because of the potential impact of on-going operations.

a. Variation in Strength. The alternatives examined for FY 72 include variable ground force authorizations within total RVNAF authorizations of 1.0, 1.1, and 1.2 million, respectively. The current plan for FY 72 is for a level of 1.1 million (accelerated from FY 73). A reduction in the currently planned level of 1.1 million appears inappropriate during FY 72 based on current projections of the situation in RVN and until all US combat and combat support forces are withdrawn. An increase to a 1.2 million level is considered but has serious disadvantages in view of estimated manpower and equipment resources reasonably available as well as potential training shortfalls.

b. Improvements in Quality. Options considered to improve the quality of GVN forces include improved equipment for PSDF, increased pay for RVNAF, and addition of certain specialized units. While the options offer the prospect of some quality improvement in the long term, no dramatic short-term improvement is anticipated.

c. Redisposition of Forces. There is a potential shortfall in friendly Regular forces in MR I and northern MR II. Possible means to offset the shortfall include movements of ROK and GVN forces.

(1) ROK forces could be moved to MR I, where the main force environment near the DMZ is similar to that for which ROK forces were trained in Korea and where population densities are less than in the current area of ROK operations, thereby possibly reducing present frictions. Such a move would require negotiation and may involve a substantial quid pro quo in US financial or materiel assistance to ROK.

(2) GVN Reserve forces are now moved as required and other forces have moved for relatively short-term operations. This type of movement can continue to be used to meet temporary shortfalls. A permanent

transfer of existing units would be difficult. However, force shortfalls could be accommodated by inactivation of units in MRs III and IV and activation of new units in MRs I and II. The process is time sensitive since personnel must be recruited and the new units must be organized and trained.

(3) A new division could be created in MR I by using cadre and some units from the GVN 1st Division. To do so, two new regiments and some divisional units would have to be formed. In MR II, some existing units could probably be brought into a divisional structure with increased operational capabilities.

APPENDIX A

PROJECTION OF COMMUNIST FORCE LEVELS IN THE INDOCHINA AREA (1971-1972 DRY SEASON)

1. The potential ramifications of the current battle in the Lao Panhandle as well as the fluid situations in both north Laos and Cambodia complicate making reliable predictions of enemy force levels next year or their distribution. On the other hand, there is reason to expect that changes in the four MRs of SVN will not be dramatic.

2. Notwithstanding the foregoing, the current estimative and analytical assumptions are:

a. Local recruiting in SVN is low; and the strength levels of Local Forces, Guerrillas, and VCI are not being maintained. A small part of the flow of filler personnel from NVN has been assigned local roles; most, however, have gone to maintain Main Forces. Thus, in the absence of a fundamental change in the situation, these local forces may be expected to erode at the rate experienced during the past two years.

b. It is not anticipated that the situation in Cambodia will change in a way which will alter significantly the enemy's requirement for forces. Neither the GKR armed forces nor the communists are expected to make serious inroads in the strength of the other.

c. The 1970-1971 dry season Allied countermeasures campaign in the Laos Panhandle should be sufficiently successful to disrupt major augmentation of enemy forces in SVN during the next year. However, the enemy should be able to support logistically existing forces despite difficulties.

d. Because of current and future possible Allied pressure on the Lao Panhandle, the present level of logistical and security forces should continue to be deployed there. (Excludes most recent augmentation from NVN.)

e. North Laos - same as paragraph b (Cambodia).

f. NVN's home army will be maintained at current levels. (Includes most recent augmentation to Laos.)

TABLE

CURRENT FORCE LEVELS

	Jan-Feb 1971	Jan-Feb 1972	Reduction
South Vietnam and Cambodia			
Main & Local Forces	110-125,000	100-110,000	10-15,000
Administrative Services	70-90,000	60-80,000	10,000
Guerrillas	50-70,000	40-60,000	10,000
South Laos*	75,000	75,000	—
North Laos*	57,000	59,000	+2,000
North Vietnam*	375,000	375,000	—

---

*Includes support as well as combat troops.

VC/NVA REGULAR COMBAT FORCES IN SOUTH VIETNAM
(Thousands)

	MR-1	MR-2	MR-3	MR-4	TOTAL
NVA	27,000	15,000	20,000	7,000	69,000
VC	6,000	9,000	7,000	12,000	34,000
TOTAL	33,000	24,000	27,000	19,000	113,000

Admin Services NVA 40-50 in RVN

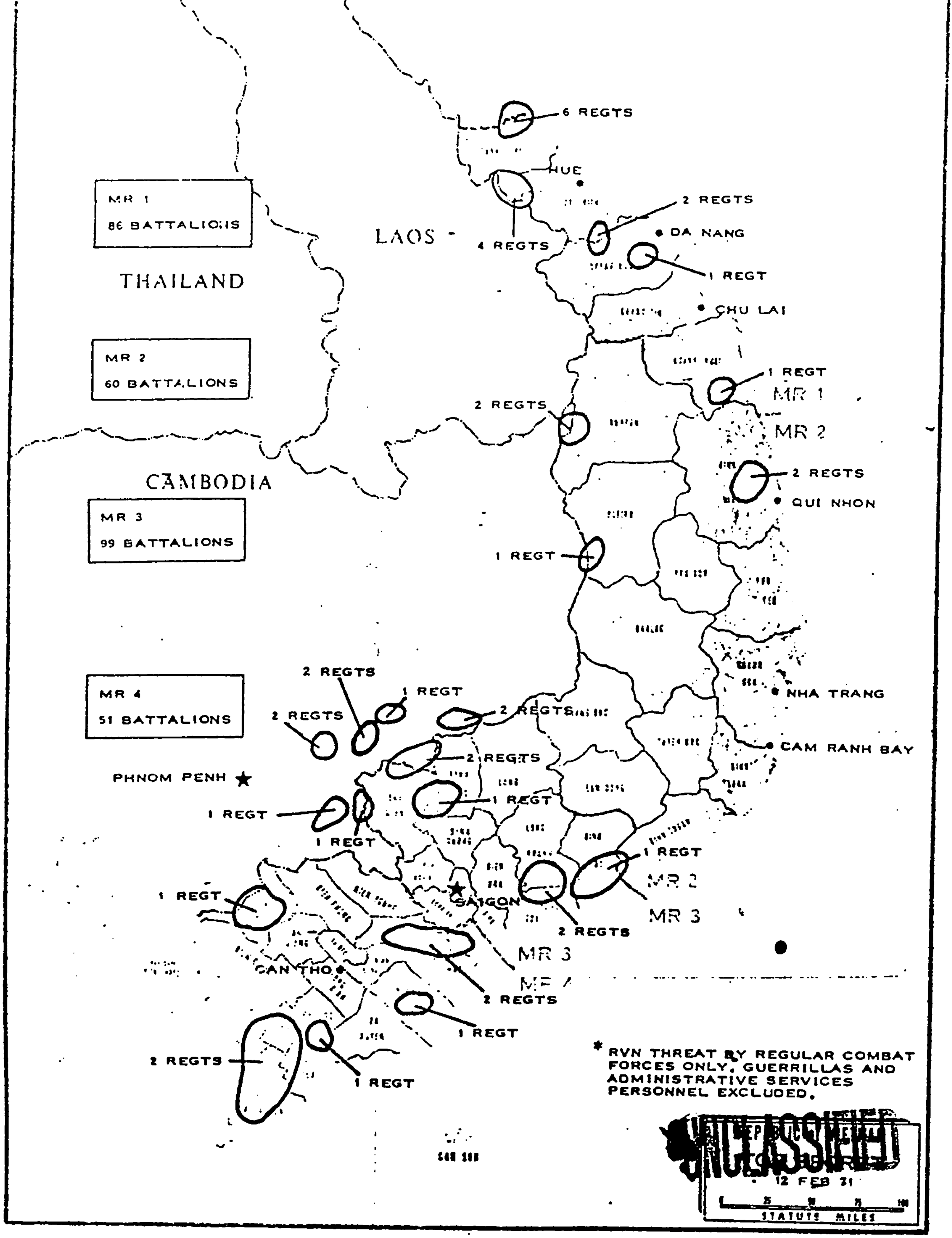
VC 40-50 in RVN

ENEMY COMBAT/COMBAT SUPPORT BY MR IN BNS.* VC/NVA

	MR-1	MR-2	MR-3	MR-4	TOTAL
VC	21	20	49	39	129
NVA	65	40	50	12	171
TOTAL	86	60	99	51	300

*Includes 60 Bns located in Cambodia of which 35 are considered dual threat to Cambodia/South Vietnam.

ENEMY THREAT AND TROOP CONCENTRATIONS*



* RVN THREAT BY REGULAR COMBAT FORCES ONLY. GUERRILLAS AND ADMINISTRATIVE SERVICES PERSONNEL EXCLUDED.

UNCLASSIFIED

APPENDIX B

RVN MILITARY REGION (MR) ANALYSIS

(Updated version
to be provided)

TABLE 1

FORCE RATIO AND CONTROL - 1970 1/

	1st Half	2nd Half	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Combat Strength Ratio						
MR I	1.5	1.5	1.5	1.4	1.4	1.6
MR II	2.5	2.2	2.6	2.4	2.2	2.2
MR III	2.8	2.5	2.7	2.8	2.7	2.2
MR IV	2.1	2.0	2.2	2.0	2.0	2.0
TOTAL RVN	2.1	2.0	2.1	2.0	2.0	2.0
GVN Control 2/ (% of Rural Pop., end of period)						
I	61	73	56	61	70	73
II	42	55	41	42	53	55
III	63	69	59	63	72	69
IV	58	69	53	58	65	69
RVN	56	67	52	56	65	67

TABLE 2

RVNAF DISTRIBUTION

	US/FW/RVNAF vs Enemy Combat Strength Ratio	RVNAF Regular/Enemy Combat Strength Ratio (2d Half 1970)	Density (All RVNAF) (000) Per Sq. Km	Per Rural Pop.
I	1.4	0.6	6	80
II	2.2	0.9	3	95
III	2.7	1.4	12	206
IV	2.0	2.0	8	61
RVN	2.0	1.1	6	95

1/ Strength of US/FW and RVNAF maneuver battalions divided by strength of VC/NVA maneuver and combat support battalions. Includes enemy units outside MR boundaries that continue to pose a dual threat.

2/ Based on special indicator developed for Vietnam Special Studies Group (VSSG). Corresponds closely to HES AB rating.

APPENDIX C

UNITED STATES/FREE WORLD FORCES

The level and composition of the US and FW Forces required in RVN at end FY 72 depends on several factors, some of which will be affected by the on-going operations in Laos and Cambodia. Some of the more significant factors affecting end FY 72 US/FWMAF are shown below.

a. US objectives in Southeast Asia. (For this paper, it is conceived that successful Vietnamization is a principle as well as an objective.)

b. Projected enemy threat for the period under consideration.

c. Progress in Vietnamization of the war effort in RVN and "Asianization" of the effort throughout Southeast Asia.

d. Requirements for security of US Forces, key facilities and crucial installations.

e. Rates of US redeployments toward the MAAG level and structure.

UNITED STATES FORCES. The following are three illustrative alternative end FY 72 force levels which include the level currently used for planning (Alt 1), a higher level (Alt 2), and a lower level (Alt 3):

ALTERNATIVE US PERSONNEL AUTHORIZATIONS IN RVN AT END FY 72

(in thousands)

		End FY 72		
	End FY 71	Alt 1	Alt 2	Alt 3
Total Personnel	254.7	153.6	200	43.4
USA	198.0	115.0	152.0	29.1
USN/CG	11.5	8.4	8.4	3.4
USAF	44.6	29.6	38.5	10.3
USMC	.6	.6	.5	.6
Man Bns 1/	33	18	25	-
Arty Bns 2/	27	13	15	-
Helo Cos 3/	75	47	18	-
Program Cost (Millions $)	10,830	6,797	7,495	4,630

1/ Does not include four Armored Cavalry Squadrons and four Air Cavalry Squadrons at end FY 71; three Armored Cavalry Squadrons and three Air Cavalry Squadrons at end FY 72 in Alt 1; and three Armored Cavalry Squadrons and four Air Cavalry Squadrons at end FY 71 in Alt 2.

2/ Includes both divisional and nondivisional artillery.

3/ Includes separate Air Cavalry Troops and those of Air Cavalry Squadrons.

A force level of 153,600 at end FY 72 would provide 18 maneuver battalions to be used primarily for security of US Forces and installations and, within capabilities, to reinforce RVNAF. A probable distribution of battalions would be about five in MR III, three in MR II, and 10 battalions in MR I.

A force level of 200,000 at end FY 72 would provide 25 maneuver battalions. This level is sufficient for the field commander to reinforce the RVNAF so as to (1) prevent a serious setback to Vietnamization; (2) provide the requisite flexibility to meet contingencies, and (3) retain in RVN a total level of military resources which will enable and encourage the RVNAF to continue out-of-country operations. The majority of this force (15 battalions) would probably be deployed in MR I, with MR II and MR III each having about five battalions.

Reducing to a US Military Assistance Advisory Group by end FY 72 will limit US military effort to assisting the Vietnamese in training their forces and to monitoring the use of US resources. Because of the recent improvements in the RVNAF operational capability, it is planned to withdraw advisors from ARVN regiments and battalions. Advisors will continue to be assigned to advise training centers, service schools, service academies, and military staffs down to division level. Military advisors will also be required at Province and District Headquarters when the threat to the Province or District is serious enough to warrant placing higher priority on military operations than civilian activities. Mobile training teams will continue to be employed as required for training the RF and PF.

FREE WORLD FORCES

There are four ROK battalions in MR I and 18 ROK battalions (two divisions) in MR II, constituting a total force of about 45,000 men. Under the Brown Memorandum, the United States supports these forces in Vietnam and makes certain other offset payments to Korea. The total cost to the United States in FY 72 is expected to be $215 million, roughly the same as in the two previous years. In addition, the ROK Forces enjoy the use of US owned equipment valued at about $90 million, with the United States retaining responsibility for upkeep and replacement.

A Thai six battalion division is in MR III. The unit contributes little to the war and is scheduled to depart RVN. One-half the force will leave July - August 1971 and the remainder will depart January - February 1972.

A Australian/New Zealand two battalion brigade is in MR III. Although an effective unit, the task force's capability is limited by its size.

APPENDIX D

RVNAF FORCE STRUCTURES

Whether available manpower will be a limiting factor if the RVNAF are to be expanded is not certain. The best estimate currently available (now about a year old) indicates that the GVN will be hard pressed to support more than the presently planned 1.1 million. In this regard three possible RVNAF force structures were analyzed -- 1 million, 1.1 million, and 1.2 million.

Under any of the three alternative total strengths, there are a number of possible force compositions and variations in ground force strengths. Further, within the ground forces themselves, there are a variety of distributions of strength which might be appropriate, depending on whether the relative importance of the main force and territorial efforts remains approximately as it is at present, or changes to emphasize the main force war, or changes so that the Territorial Forces become more important. This paper assumes variations in the total ground force strength would be approximately proportional to variations in RVNAF total strength as shown below.

TABLE 1

RVNAF FORCE STRUCTURES

	Programmed	1,000,000 Force	1,200,000 Force	
Divisions	12*	10*	14*	+ 2
Inf Bns	133	99	157	+ 24
Airborne Bns	9	9	9	—
Marine Bns	9	9	9	—
Ranger Border Def Bns	37	37	37	—
Armored Cav Sqdns	17	17	18	+ 1
Ranger Bns	20	20	20	—
Fld Arty Bns (105)	40	34	46	+ 6
Fld Arty Bns (155)	15	13	17	+ 2
Fld Arty Platoons (105)	176	176	176	—
RF Companies	1679	1679	1879	+ 200
PF Platoons	7479	7479	7479	—
RVNAF				
ARVN	477,456	440,668	514,988	
VNN	39,611	37,175	43,251	
VNAF	46,998	46,998	46,998	
VNMC	13,462	13,462	13,462	
RF/PF	552,473	491,406	582,561	
	1,100,000	1,029,709	1,201,260	
Difference from Programmed Force		- 39,000 ARVN & VNN - 61,000 RF/PF	+ 70,000 ARVN/VNN + 30,000 RF/PF	
PROGRAM COST[1/] (Millions $)	3400[2/]	3280	3605	+ 215 Million

*Includes 1 Abn Div and 1 Mar Div equivalent

1/ FY 72 GVN Budget (Approximately $1.3B) is divided by DOD Approved FY 72 RVNAF Manpower (1,100,000) to yield an incremental planning factor of approximately $1200 per man. $1200 x 100,000 equals $120M per year plus or minus to the DOD Approved Base Case.

2/ Cost estimating relationships developed by the US Army Field Operating Cost Agency based upon data gathered in Vietnam in Nov-Dec 70 indicate that the "Programmed" cost shown above of $3400 may be understated by $200M.

When viewing RVNAF force requirements within the context of the Area Security Concept, it is evident that the assumptions on the enemy threat and the degree of successful Vietnamization impact significantly on the type military force structure desirable within a given RVNAF force level. As the enemy threat decreases and geographical boundaries of secure areas and consolidation zones increase, more emphasis can be placed on the role of territorial forces thus freeing regular forces for operations elsewhere or allowing for a restructuring within the total force. This condition, as was pointed out in the MR studies and as is evident from current operations, is perhaps best exemplified in MR IV. Conversely, if the enemy threat increases or significant improvement is not attained in increasing secure areas and consolidation zones, emphasis should be placed on increasing the composition of regular force elements within a given force structure. This condition was highlighted in the MR studies where the threat of enemy force operations in clearing and border surveillance zones in MR I and II and limited gains in pacification in MR II were evident.

The attendant costs and actual force structure changes to be made when varying the force composition within a total force ceiling cannot be determined precisely until the type change, nature of force desired, and place of operation is specified. Nevertheless, for the purpose of this paper an estimate was made of the attendant impact on territorial forces if a regular division were added and conversely what equivalent gains in territorial forces would result from deactivation of a regular division. Data on this estimate is as follows:

	Strength	Initial* Investment	Annual* Recurring	Total*
397 PF Plt @ 32 men	12,704	12.7	11.5	24.2
103 RF Cos @ 123 men	12,669	14.9	17.2	32.1
1 ARVN Division	12,700	39.5	45.8	85.3

* Cost Data in Millions of Dollars. Source is RVNAF Handbook.

The alternative for expansion of RVNAF above the current 1.1 million ceiling would, in time, provide the necessary forces to augment friendly units in the northern two MRs of RVN. Before choosing this option, however, certain factors must be considered.

The current 1,100,000 man ceiling for RVNAF appears to be straining RVN's manpower resources. To raise the ceiling to provide for additional units would further aggravate this condition. Although RVN has never had a population census, the figures below, developed by CINCPAC, are the best current estimate of manpower requirements and resources.

	Current Strength as of 30 Nov 70	FY 71	FY 72	FY 73
a. Authorized Military Requirement				
RVNAF (includes RF & PF)	1,042,676	1,078,345	1,092,087	1,100,000
Paramilitary (less PSDF)	152,646	165,285	163,285	149,160
SUBTOTAL:	1,195,322	1,243,630	1,255,372	1,249,160
b. Estimated Requirement to Sustain Authorized Force				
RVNAF Casualties (Not returned to duty)		33,000	33,500	34,000
RVNAF Desertions (Not Returned to Duty)		86,500	62,800	63,600
RVNAF Dischartes (Less Physical Discharges)		8,900	9,000	9,130
National Police Casualties (Not Returned to Duty)		680	690	690
National Police Desertions (Not Returned to Duty)		1,130	570	570
National Police (Dismissed, Resigned, Retired)		2,000	2,040	2,040
SUBTOTAL:		132,210	108,600	110,030

	FY 71	FY 72	FY 73
c. Estimated Sources of Manpower			
Incoming 18 yrs age group	194,000	199,000	223,000
Hoi Chanh	50,000	55,000	55,000
Deserters	77,850	56,520	57,240
SUBTOTAL:	321,850	310,520	335,240
d. Total Estimated Requirements to Sustain Force	132,210	108,600	110,030
Minimal Increase in Economy/ Employment	80,000	80,000	80,000
Force Increase	48,308	11,742	- 6,212
SUBTOTAL:	260,518	190,342	183,818
e. Surplus Available to Meet Unprogrammed Military and Economic Requirements	+ 61,332	+ 120,178	+ 151,422
f. Surplus Available to Meet Unprogrammed Military Requirements	+ 24,173	+ 57,503	+ 70,875

As can be noted in the preceding table, the currently available manpower estimate shows a surplus of about 57,000 to meet unprogrammed military requirements in FY 72. This surplus remains after subtracting from the total manpower pool (a) requirements for increases to the economy; (b) force increases; and (c) input necessary to sustain the authorized force, which include 33,000 casualties and almost 63,000 deserters not returned to duty.

It is doubtful that a decline in casualties can be forecast in any situation which would require an increase in the size of RVNAF. However, there are programs to facilitate identification and return of deserters to duty which may reduce desertions over time below the figure assumed for 1972. In any event, the majority of the deserters not returned to duty may actually be injections into the economy since few go over to the enemy. A more important consideration is that, as GVN control of its population has increased over the past several years, the manpower available to GVN has also increased and each periodic estimate by US Agencies of the maximum total supportable force has proven to be conservative. The possibility of an increase in GVN force levels cannot be ruled out solely on the basis of manpower requirements versus manpower resources.

A second important factor is the likelihood that some of the available manpower will be needed for increases in civilian employment related to economic development. If the United States absorbs the cost and if economic development is deferred, these personnel could be diverted to the Armed Forces. It is reasonable to expect that, under appropriate circumstances, further increases in GVN force strengths could be achieved and supported.

Another factor which impacts on changes in the RVNAF is that any increase in force levels is highly time sensitive. Lead time in developing effective members of the RVNAF may vary from as little as three months in the case of replacements to two years as in the case of fielding a major unit. This includes the time for procurement, induction of personnel, individual and advanced training, and specialist and unit training. An interrelated factor is the equipment variable. Once the type unit and its activation schedule is determined, the procurement of equipment may be the critical issue involved. Whether the equipment is available in-country, available from US stocks, or requires production and delivery to the RVN will determine the time required for unit organization and readiness. Decisions therefore to increase the RVNAF in a major degree must take into account the time required to provide the properly trained personnel with the necessary equipment and to train further the unit before it can be considered effectively a part of the overall force structure.

APPENDIX E

CONSIDERATIONS FOR REDISTRIBUTION OF FORCES

Several means have been considered to offset the potential force shortfalls in MR I and MR II postulated in the MR studies. They include movement of ROK Forces and redistribution of RVNAF units on either a permanent or temporary basis.

a. Movement of the ROK Forces. Possible ROK contributions to improved distribution of forces are redeployment either into MR I or into Cambodia. In MR II, the ROKs have secured their areas of operation to the point where in some cases RF/PF forces are between them and the enemy, and the ROK assignments could probably be assumed by GVN RF forces. Conceivably, therefore, they could be redeployed to augment RVN forces or to relieve and free RVN forces for deployment elsewhere. If moved to the western DMZ area, the ROK forces would be positioned for a type of operations and in an area of terrain comparable to that for which they have been trained in the ROK. Further, moving them into less densely populated areas would lessen a source of friction between South Korean forces and South Vietnamese personnel. The in-country cost of moving the two divisions from MR II into the DMZ area would be about one million dollars.

While in earlier stages of the war, the ROKs may have given a good account of themselves, their performance in recent years has been questioned. For example, in 1970, the ROKs represented 17 percent of the friendly main force strength in MR I yet absorbed only two percent of the friendly main forces casualties. They appear reluctant to undertake offensive operations and are useful for guarding only a small sector of the populated area. Similarly in MR II, they represent 30 percent of the regular combat strength but logged only 14 percent of the battalion days and absorbed only some 18 percent of the casualties. Their operations have been criticized as inappropriate to the situation in MR II, yielding declining returns. In general, the ROK soldiers do not get along well with local populations and their conduct toward civilians has been a source of increasing friction.

In the fall in 1970, the RVNAF commander of MR II requested the ROKs to fill in behind withdrawing US troops along Route 19. This assignment would have involved a move of only a few miles from present areas of operations. In return, the ROKs asked for 94 APCs, 32 tanks, and 52 helicopters in addition to the support they were already receiving. While difficult to estimate without further information, the package would have cost upwards of $20 million in investment alone. The price was judged too high and the move never made.

More recently, the commander of the ROK forces in Vietnam has approached the Cambodians about moving the Korean forces to Cambodia. Sirik Matak is supposedly interested. How much the Koreans would ask and who would have to pay the costs is not clear. In this event it would seem reasonable to assume that the United States would in one way or another end up contributing and that the price would be high.

Information from other channels indicates that the approach to the Cambodians may have been an initiative solely on the part of the Korean field commander. There are no indications of any current interest from Seoul of going into Cambodia. President Park's statements concerning withdrawals are largely election year rhetoric and Seoul seems inclined to stay in Vietnam under present conditions indefinitely. The US domestic political impact of Korean troops deploying from Vietnam to Cambodia is likely to be unfavorable, especially if US money is involved.

In summary, an attempt to redeploy Korean forces has major disadvantages. The ROK forces in recent years have not shown themselves to be willing to expend an effort commensurate with their size or with the costs of supporting them. Any redeployment in Southeast Asia is likely to come at a price that is not worth the combat effort that can be expected.

On the other hand, allowing the Koreans to return home would end an irritant in Vietnam, avoid some US domestic problems, and result in an annual savings of over $200 million. In addition, the return of the Koreans home could result in a further saving in the costs of modernizing the Korean armed forces if they were allowed to take US title equipment with them (current value estimated at $90 million).

b. Movement of RVNAF Units from MRs III and IV. The movement of units from MRs III and IV is a possibility, if and when the threat to these two important regions permits. The most likely type of redeployment would be on a temporary basis. Such moves have been made in the past, particularly by the JGS reserve forces (VNMC and airborne units). As the threat to MRs III and IV lessens, this deployment could be made more frequently. Movement of combat units from one MR to another on a permanent basis is much more difficult. The attendant morale, dependent housing, and other associated problems which occurred in 1968 after movement of the ARVN 25th Division from MR II to MR III exemplify the problems associated with such moves. GVN decisions on whether to agree to either a temporary or permanent move will depend on such factors as seasonal weather, the effectiveness of FANK, and the results of friendly operations in NE Cambodia and Southern Laos to cut the enemy's LOC to MRs III and IV.

(1) Seasonal Weather. The monsoons (See TAB A) have a significant influence on military operations in Vietnam. During the SW monsoon period when movement and military operations are very difficult and limited in Cambodia and southern portions of South Vietnam, it would be feasible to move units temporarily into the coastal plains areas of MR I and II. Such unit movements could enable increased offensive operations to improve control in the northern MRs.

(2) Effectiveness of FANK. FANK force effectiveness will be an important factor in decisions relevant to RVNAF unit movements. During the 1971 dry season RVNAF forces ranging up to force levels as high as 22,000 have been engaged in combat operations in Cambodia against VC/NVA infiltration routes and in assisting FANK forces maintaining vital LOCs. As FANK combat capability and efectiveness increases, there will be an attendant increase in flexibility in where and how RVNAF forces are employed.

(3) Current Operations. The results of present RVNAF offensive operations in Cambodia and the Laotian panhandle is uncertain. It appears that serious damage has been inflicted on enemy forces and supplies. The effect on FY 72 friendly force projections is unknown at present. Later evaluation of the enemy threat in

light of field command evaluation of these operations will impact on redeployment options open both for US and GVN Armed Forces.

c. Reallocation of Strengths Within Current Resources

(1) RVNAF forces in MRs I and II could be strengthened by RVNAF zeroing out units in MRs III and IV and activating them in the former MRs. Possibilities for such an action would be deactivating RF/PF units in areas in which the PSDF are firmly in control and/or reducing ARVN regiments in MRs III and IV from four to three battalion units. It should be noted that the GVN is currently planning changes in RVNAF force structure along these lines. Proposals under consideration provide for eliminating the 4th battalion in each ARVN regiment and adding the deactivated battalion's rifle companies to the remaining battalions in the regiment (providing four rifle companies per battalion vice the current three rifle companies per battalion). In addition, GVN proposes to reduce the strength of each PF platoon from 35 to 32 men. They intend to use space savings resulting from the above changes to add one Armed Cavalry Regiment, 10 Military Police Companies,

17 RF battalion headquarters, and 219 PF platoons to their force structure.

(2) The present 1st ARVN Division could be used to form a two-division force to provide security in northern MR I. Logistic support would then continue to be provided by the existing MR I Corps System. The two ARVN divisions would be formed by reducing the 1st Division to standard configuration and using the excess plus additional resources to form a new division. Assets available in the 1st ARVN Division, additional resources required, and the proposed reorganization are shown below:

PROPOSED REORGANIZATION

1st ARVN Division	New ARVN Division
Old Regt Old Regt New Regt	Old Regt Old Regt New Regt
9 Old Bns 3 New Bn Hqs	8 Old Bns 4 New Bn Hqs
1 A/C Sqdn	1 A/C Sqdn
1 Engr Bn	1 Engr Bn
3 105 How Bn	3 105 How Bn
1 155 How Bn	1 155 How Bn

COST OF ADDITIONAL RESOURCES

TYPE STRUCTURE	INVESTMENT	ANNUAL RECURRING
1 Division Base (-90 spaces)	$12.2M	$6.2
2 Regimental Bases	2.0	1.4
7 Infantry Battalion Headquarters	.7	.7
23 Infantry Companies	9.6	10.2
1 105 How Battalion	2.6	6.4
2 155 How Batteries	2.0	2.5
1 155 How Bn Hq	.5	.5
TOTAL COSTS	$29.6M	$27.9M

TOTAL $57.5M

(3) Another possibility to strengthen ARVN force posture would be to combine forces in Pleiku and Kontum Provinces into a force tailored along the lines of an ARVN division. The proposed force structure would be developed to include those assets in terms of maneuver battalions, staff organization/manning and combat and combat service support elements that would enable it to function independently in sustained combat with NVA forces. As a minimum, it would be organized with two infantry regiments and would possess a division base (standard ARVN configuration) capable of accepting

and sustaining under its OPCON the equivalent of a third infantry regiment. Logistic support would continue to be provided by the existing MR II Corps system. The necessary staff, combat and combat service support augmentation could be realized esentially from MR II Corps nondivisional assets. The proposed reorganization and additional resources required are shown below:

PROPOSED REORGANIZATION

Headquarters, (ARVN Div equivalent)

42d Infantry Regiment } or other numbered regiments as desired
47th Infantry Regiment }
Third Infantry Regiment (or equivalent) upon augmentation

ARVN Division combat and combat support elements to include:

2 - Direct Support (DS) Artillery Battalions

(Third DS Battalion upon augmentation)

1 - General Support Artillery Battalion

3 - Armored Cavalry Squadron

3 - Scout Companies

1 - Signal Battalion

1 - Medical Company

2 - Ranger Battalions

ADDITIONAL RESOURCES REQUIRED

STRUCTURE	INVESTMENT	ANNUAL RECURRING
1 Direct Support Artillery Bn	$2.7M	$6.4M
1 General Support Artillery Bn	3.2	7.6
1 Signal Battalion (-) and elements of Logistic Battalion, Infantry Division	3.3	1.0
TOTAL COSTS	$9.2M	$15.0M
	TOTAL	$24.2M

d. RVNAF Logistical Capability. Although the Vietnamization Program has made improvements in the overall RVNAF logistical posture, internal management capabilities in the logistic area are classed as marginal. The RVNAF capability to provide responsive logistic support to tactical operations is constrained by the shortage of logistic managers, lack of fully trained logistic units, and the inability of GVN to fill essential civilian logistic positions. Moreover, the RVNAF command structure, which provides a high degree of autonomous control to Military Region Commanders, hampers essential centralized control and direction for logistic matters, since the MR commanders can and do override the Central Logistic Command (CLC) guidance. With the expansion of logistic forces as part of the Consolidated RVNAF Improvement and Modernization Program, the RVNAF Logistic System should attain the planned level of limited self-sufficiency by the time, under the present planned program, that the last US logistical support units redeploy in FY 73. US support, however, will be required for the foreseeable future in the logistic areas of port operations, sealift and airlift operations, calibration operations, and out-of-country depot maintenance of tracked vehicles and major assemblies.

RVNAF currently has a high degree of self-sufficiency in road and rail transportation, and in regular supply and maintenance operations. Partial self-sufficiency in depot maintenance operations will be reached with completion of the RVNAF Base Depot Upgrade Program in CY 1972 and in ammunition management upon completion of the Ammunition System Upgrade Program in CY 1973; however, continual out-of-country depot maintenance support will be essential. Should US withdrawals be accelerated, with US forces being reduced to a MAAG by end FY 72, major modification of the current logistic Vietnamization Plan would be required. On-going programs with completion dates scheduled during FY 73 would have to be accelerated, or alternative means developed for their accomplishment.

TAB A TO APPENDIX E

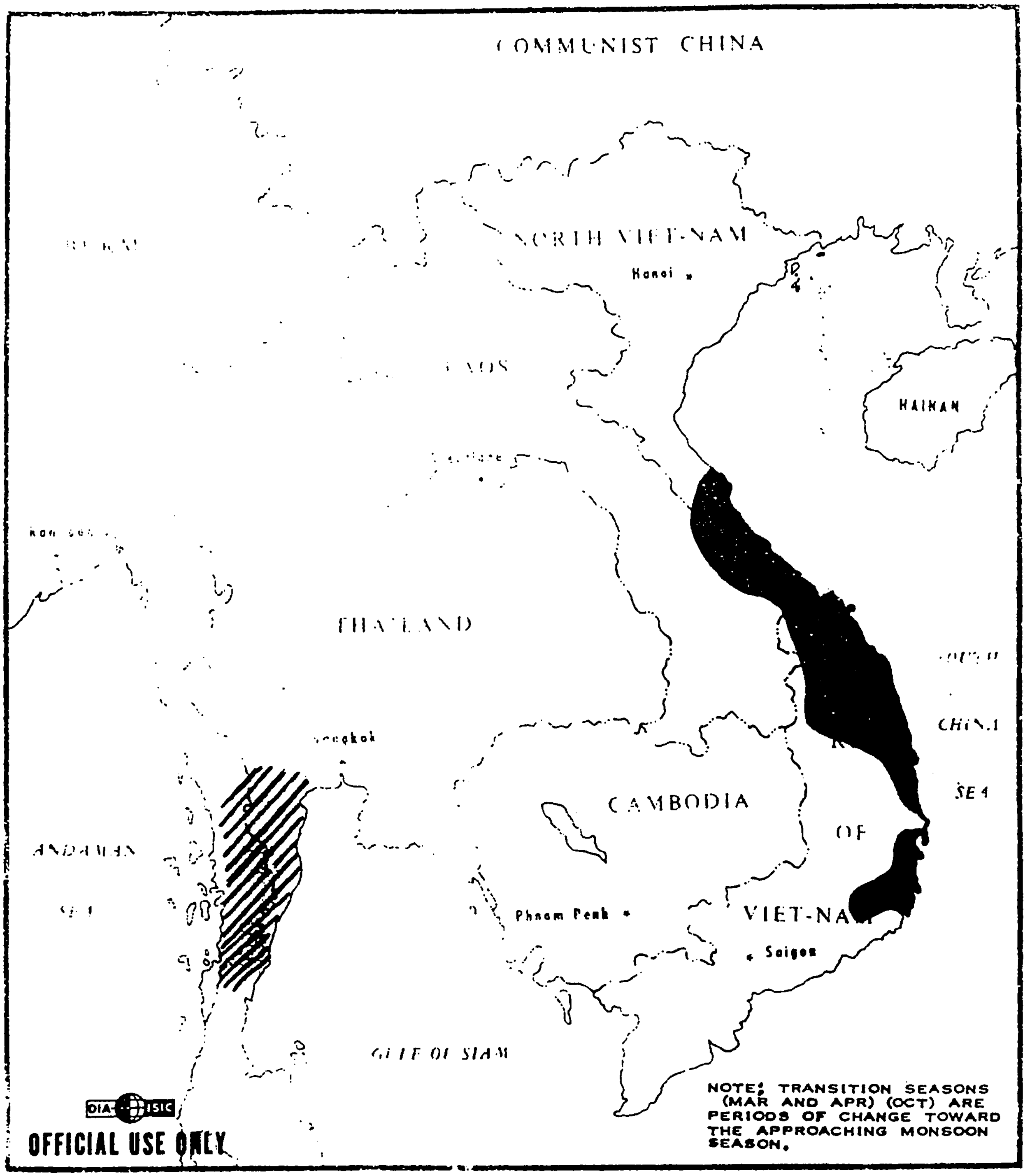
SOUTHEAST ASIA WEATHER

1. The weather in Southeast Asia has a strong influence on military operations there. Of the two monsoons, the southwest has the greater effect on over-all activity since it brings heavy rains to most of the country between May and September; one exception is the strip of land east of the coastal mountain range in central Viet-Nam which remains dry.

2. Transitional seasons occur in March-April and again in October. The latter precedes the northeast monsoon which lasts from November through February and brings rain to the coastal area and gradual dryness to the land mass west of the mountains. Road trafficability and air operations are both affected by these two seasons.

3. The accompanying weather charts have been simplified for quick reference. The ground trafficability charts use seven inches of rain a month as the criterion for determining the areas where military operations are difficult. Less than that amount usually will allow an acceptable degree of traffic.

GROUND TRAFFICABILITY—NORTHEAST MONSOON (NOV-FEB)



NOTE: TRANSITION SEASONS (MAR AND APR) (OCT) ARE PERIODS OF CHANGE TOWARD THE APPROACHING MONSOON SEASON.

OFFICIAL USE ONLY

■ POOR—DIFFICULT TO OPERATE FOR MORE THAN 50% OF THE SEASON.

☐ GOOD—OPERATIONS POSSIBLE FOR MOST OF THE SEASON.

▨ FAIR—OPERATIONS POSSIBLE FOR MORE THAN 50% OF THE SEASON.

APPENDIX F

QUALITY IMPROVEMENTS

As pointed out earlier in the study, GVN will have to increase the power of her armed forces to compensate for US and third country withdrawals. Because of fiscal and manpower constraints, however, it may not be practical to achieve the desired increase in power by expanding RVNAF. An alternative to raising the RVNAF manpower ceiling would be to make qualitative improvements in the currently programmed forces. Improvements could be considered in the areas of material, personnel, training, and organization.

The Improvement and Modernization (I&M) Program is providing equipment to the RVNAF ground forces in accordance with a schedule agreed to by MACV and JGS and based upon the RVNAF ability to use and maintain the equipment. Ground forces are being issued US Army standard equipment. Although improvements in units not yet modernized are to be expected, major changes in the program for the regular ground forces cannot be accelerated since it is based on the capability of the indigenous forces. Although material improvement could be made in the People's Self Defense Force (PSDF), mainly by arming the PSDF with M-16 rifles, the PSDF's adverse weapons lost to weapons captured ratio (.43:1) coupled with the innate GVN reluctance to arming the PSDF would seem to militate against this course of action.

From the onset of the fighting, RVNAF has expanded continuously and has operated below its authorized manpower ceiling. By maintaining a set manpower ceiling, the RVNAF will be afforded the opportunity to achieve and maintain a set personnel posture and will not be required to dilute its personnel resources to form new units.

Training will be improved by execution of a current plan to consolidate 22 training facilities into 10 training centers. The consolidation will result in better facilities, a higher caliber of instructors, more efficiently managed and supervised training, and an increase in the number of personnel being processed through the centers.

Qualitative improvements can be made by reorganizing forces within the established force structure to achieve greater cost effectiveness or a special capability. An example of this is the RVNAF's recent recommendation to eliminate the battalion headquarters and headquarters company in the fourth battalion of ARVN regiments, to redistribute the rifle companies of the deactivated battalion to the remaining battalions in the regiment, and to use the spaces to activate an armored cavalry regiment (ACR) and military police battalions. Costs which generally equate to those of an ARVN infantry division may be associated with this course of action. For example, adding an ACR to the RVNAF structure could cost:

ACR Major Equipment Investment	$50 M
Operating Cost (Ammo, Equip, OMA	35
TOTAL	$85 M

Qualitative improvement might be stimulated by further improvement in leadership and personnel policies. In spite of notable improvement in effectiveness achieved in some divisions by new and more aggressive leadership, net desertion rates remain amazingly constant, although currently at the low side of their standard range of variation. Further improvement in leadership especially at the junior officer and NCO level are needed and being sought through training programs and improved promotion policies. Some further improvement might also be achieved by revision of personnel policies and pay. A 10 percent pay raise estimatedly would cost $130 million. Considering the rate of inflation, such a raise would seem warranted. However, it would not be likely to influence desertion rates. In part, the desertion problem is technical -- caused by the 15 day absence rule, the reluctance of many commanders to grant extended leaves, and the difficulty of traveling (especially on schedule). Some further efforts might help in lowering the desertion rate such as the dependent shelter and food supplement program which are already underway. Other special personnel measures have been considered such as a dislocation allowance for combat troops operating an extended distance from home bases, since there is evidence that such absences may be related to the cause or rate of desertions.